Description

Build a small CRUD application for managing employee leave requests. Employees can request vacation days, and managers can approve/deny them.

Both backend (.NET) and frontend (React) must be included. Feel free to choose what good practices to apply (tests, CI, Docker, etc.), but should document decisions.

Try to deliver code that you consider suitable for a production environment.

Requirements

Backend (.NET)

1. **Entities**

   - `Employee` (id, name, email, role: "Employee" or "Manager")

   - `LeaveRequest` (id, employeeId, startDate, endDate, status: Pending/Approved/Rejected, reason)

2. **Endpoints**

   - `GET /api/leaverequests` (employee sees their own; manager sees all)

   - `POST /api/leaverequests` → create new request

   - `PUT /api/leaverequests/{id}` → update status (only manager)

   - `DELETE /api/leaverequests/{id}` → cancel (only owner if still pending)

3. **Business rules**

   - **No overlapping approved leave for the same employee**

   - Requests that exceed 15 consecutive days must be auto-rejected unless manager overrides.

Frontend (React + TypeScript)

1. **Pages**

    - Dashboard: list of leave requests.

    - Create request form (date pickers, reason).

    - Manager view: approve/reject requests.

2. **Features**

    - Show errors from backend (e.g., overlapping leave).
    - Simple responsive design (candidate's choice: Tailwind, MUI, etc.).
    - At least one test (e.g., form validation).

Deliverables

- GitHub repo with `/backend` and `/frontend` (or two repos).

- README with setup instructions and design decisions.

- Seed data: one employee + one manager user.